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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,787	04/21/2004	Anthony D'Agostino	1744	5077
23623 7590 03/10/2008 AMIN, TUROCY & CALVIN, LLP 1900 EAST 9TH STREET, NATIONAL CITY CENTER 24TH FLOOR, CLEVELAND, OH 44114				
EXAMINER MILLER, BRANDON J				
ART UNIT		PAPER NUMBER		
2617				
NOTIFICATION DATE		DELIVERY MODE		
03/10/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/828,787

Applicant(s)

D'AGOSTINO ET AL.

Examiner

BRANDON J. MILLER

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-9,11-15,17-19 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11-15,17-19 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Disposition of Claims

- I. Claims 1, 3-9, 11-15, 17-19, and 21-27 remain pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

II. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

III. Claims 1, 3-9, 11, 14-15, 17-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery, Jr. (US 6,205,343 B1) in view of Romans (US 6,564,074 B2).

Regarding claim 1 Montgomery, Jr. teaches a power management system for a wireless mobile terminal (see col. 4, lines 47-50). Montgomery, Jr. teaches a power management component that utilizes at least one power management scheme to selectively control power to at least one portion of the wireless mobile terminal while maintaining power to a central processing unit (CPU) and a network radio of the wireless mobile terminal to ensure reliable uninterrupted network communication while removing power from other portions of the wireless mobile terminal to reduce consumption (see col. 4, lines 47-52 and col. 5, lines 1-7). Montgomery, Jr. does not specifically teach a configuration bank that stores power management schemes for a wireless mobile terminal and the power management component controls the power of the at least one portion of the wireless terminal by wirelessly transmitting one or more control signals to the network radio of the wireless mobile terminal. Romans teaches a configuration bank that stores power management schemes for a wireless mobile terminal (see col. 3, lines 15-20). Romans teaches the power management component controls the power of the at least one portion of the wireless terminal by wirelessly transmitting one or more control signals to the network radio of the wireless mobile terminal (see col. 3, lines 39-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a configuration bank that stores power management schemes and controlling the power of the at

least one portion of the wireless terminal by wirelessly transmitting one or more control signals to the network radio of the wireless mobile terminal because both Montgomery, Jr. and Romans teach managing power for wireless mobile terminals that can receive and transmit wireless signals.

Regarding claim 3 Montgomery, Jr. teaches a power management component that is activated to remove power via one of: a time lapse; a period of inactivity; an event; a user request; a programmatic application program interface (API); network data; an application, the wireless mobile terminal, and another wireless mobile terminal (see col. 4, lines 60-67 and col. 5, lines 1-7).

Regarding claim 4 Montgomery, Jr. teaches the power management component is activated to resume power via one of: pressing a button; turning a key; touching an active touch screen area; a programmatic control; voice; expiration of a timeout; a date; an electrical current; a request; a signal; motion; a trigger; a link status change; a network keep alive; a proxy-ARP packet; a re- authentication packet; a directed packet; wake-on-LAN request; and reception of network data (see col. 3, lines 39-41 and col. 5, lines 1-7).

Regarding claim 5 Montgomery, Jr. teaches wherein the power management operates as a background application (see col. 5, lines 1-7).

Regarding claim 6 Montgomery, Jr. teaches automatically executing the power management scheme to reduce power consumption or waits for user confirmation (see col. 5, lines 1-7).

Regarding claim 7 Montgomery, Jr. teaches the power management component executes in one of wireless mobile terminal BIOS, an application, an external device, and a wireless mobile terminal operating system (see col. 5, lines 1-7 and Fig. 1).

Regarding claim 8 Romans teaches the power management component utilizes one of intermittent and continuous polling of the wireless mobile terminal to automatically determine when power should be reduced and dynamically applies the power management scheme to reduce power reduced (see col. 4, lines 15-30 and col. 6, lines 10-33).

Regarding claim 9 Montgomery, Jr. teaches the power management scheme is based on at least one of a wireless mobile terminal characteristic, a state of one or more portions of the wireless mobile terminal, a user identified configuration, and a user attribute (see col. 4, lines 60-67 and col. 5, lines 1-7).

Regarding claim 11 Montgomery, Jr. teaches the power management scheme is one of a default, a user defined, an application generated and an intelligence created configuration (see col. 4, lines 60-67 and col. 5, lines 1-7).

Regarding claim 14 Montgomery, Jr. teaches a method that manages power for a portable terminal (see col. 4, lines 47-50). Montgomery, Jr. teaches removing power from a first portion of the portable terminal to reduce battery power consumption; maintaining reliable uninterrupted portable terminal network connectivity at least by supplying full power to a central processing unit (CPU) and a network radio (see col. 4, lines 47-52 and col. 5, lines 1-7). Montgomery, Jr. teaches receiving indicia that power should be supplied to a second portion of the portable terminal and supplying power to the second portion of the portable terminal (see col. 4, lines 36-41). Montgomery, Jr. does not specifically teach receiving indicia from a remotely located

power manager indicating power should be removed from a first portion of the portable terminal and wirelessly receiving indicia from the remotely located power manager to the network radio indicating that power should be supplied to a second portion of the portable terminal. Romans teaches receiving indicia from a remotely located power manager indicating power should be removed from a portable terminal and wirelessly receiving indicia from the remotely located power manager to a network radio indicating that power should be supplied to a portion of the portable terminal (see col. 3, lines 39-50 and col. 4, lines 1-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include receiving indicia from a remotely located power manager indicating power should be removed from a first portion of the portable terminal and wirelessly receiving indicia from the remotely located power manager to the network radio indicating that power should be supplied to a second portion of the portable terminal because both Montgomery, Jr. and Romans teach managing power for wireless mobile terminals that can receive and transmit wireless signals.

Regarding claim 15 Montgomery, Jr. teaches obtaining a power management configuration that defines a power removal scheme (see col. 4, lines 60-67 and col. 5, lines 1-7).

Regarding claim 17 Montgomery teaches activating a power management utility via one of: a time lapse; a period of inactivity; an interrupt; an event; a user request; a programmatic application program interface (API); network data; an application, the wireless mobile terminal, and another wireless mobile terminal; pressing a button; turning a key; touching an active touch screen area; a programmatic control; voice; expiration of a timeout; a date; an electrical current; a request; a signal; motion; a trigger; a link status change; a network keep alive; a proxy-ARP

packet; a re-authentication packet; a directed packet; wake-on-LAN request; and reception of network data terminal (see col. 4, lines 60-67 and col. 5, lines 1-7).

Regarding claim 18 Romans teaches returning power to the portion of the portable terminal upon receiving a signal from a wake event comprising one of a link status change, a network keep alive, a proxy-ARP packet, and a re-authentication packet (see col. 4, lines 15-30 and col. 6, lines 10-33).

Regarding claim 19 Montgomery, Jr. teaches a power management method that facilitates distribution of power to portions of a wireless communicating device (see col. 4, lines 47-50). Montgomery, Jr. teaches retrieving an associated power management scheme; employing the power management scheme to remove power from the portion of the wireless computing device while sustaining full power to the wireless computing device's central processing unit (CPU) and network radio to provide an uninterrupted channel of communication with a network (see col. 4, lines 47-52 and col. 5, lines 1-7). Montgomery, Jr. does not specifically teach employing one of intermittent and continuous polling of the wireless computing device via the network radio to automatically detect when power should be reduced. Romans teaches employing one of intermittent and continuous polling of the wireless computing device via the network radio to automatically detect when power should be reduced (see col. 6, lines 10-33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include employing one of intermittent and continuous polling of the wireless computing device via the network radio to automatically detect when power should be reduced because both Montgomery, Jr. and Romans teach managing power for wireless mobile terminals that can receive and transmit wireless signals.

Regarding claim 21 Montgomery, Jr. teaches dynamically adjusting the power applied to the at least one portion of the wireless computing device (see col. 4, lines 60-67 and col. 5, lines 1-7).

Regarding claim 22 Montgomery, Jr. teaches drawing less power from a battery utilized to power the wireless computing device (see col. 4, lines 60-67 and col. 5, lines 1-7).

Regarding claim 23 Montgomery, Jr. and Romans teach a device as recited in claim 11 and is rejected given the same reasoning as above.

Regarding claim 24 Montgomery, Jr. teaches employing intelligence to facilitate managing the power applied to the at least one portion of the wireless computing device (see col. 3, lines 39-41 and col. 5, lines 1-7).

IV. Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery, Jr. (US 6,205,343 B1) in view of Romans (US 6,564,074 B2) and Hetzler (US 5,954,820).

Regarding claim 12 Montgomery, Jr. and Romans teach a device as recited in claim 1 except for an intelligence created configuration that is generated based on at least one of machine learning, a statistic, a probability, an inferences and/or a classifier. Hetzler teaches an intelligence created configuration that is generated based on at least one of machine learning, a statistic, a probability, an inferences and/or a classifier (see col. 2, lines 63-67 and col. 3, lines 1-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include an intelligence created configuration that is generated

based on at least one of machine learning, a statistic, a probability, an inferences and/or a classifier because Montgomery, Jr., Romans, and Hetzler all teach managing power for wireless mobile terminals that can receive and transmit wireless signals.

Regarding claim 25 Montgomery, Jr., Romans, and Hetzler teach a device as recited in claim 12 and is rejected given the same reasoning as above.

V. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery, Jr. (US 6,205,343 B1) in view of Romans (US 6,564,074 B2) and Loughran (US 7,185,211 B2).

Regarding claim 13 Montgomery, Jr. and Romans teach a device as recited in claim 1 except for an API that is utilized for at least one of invoking the power management component and providing a power management scheme. Loughran teaches an API that is utilized for at least one of invoking the power management component and providing a power management scheme (see col. 5, lines 1-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include an API that is utilized for at least one of invoking the power management component and providing a power management scheme because Montgomery, Jr., Romans, and Loughran all teach managing power for wireless mobile terminals that can receive and transmit wireless signals.

VI. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery, Jr. (US 6,205,343 B1) in view of Romans (US 6,564,074 B2) and Roy (US 2005/0041652 A1).

Regarding claim 26 Montgomery, Jr. teaches a system that facilitates wireless mobile power management (see col. 4, lines 47-50). Montgomery, Jr. teaches determining when to activate power management; acquiring a selective power management configuration; and applying the power management configuration to selectively lower power applied to portions of the wireless device to mitigate power consumption while maintaining full power to a CPU and a network radio to ensure reliable uninterrupted network communication (see col. 4, lines 47-52 and col. 5, lines 1-7). Montgomery, Jr. does not specifically teach a wireless mobile barcode scanner and wirelessly transmitting one or more control signals to the network radio of the wireless mobile barcode scanner. Romans teaches the power management component controls the power of the at least one portion of the wireless terminal by wirelessly transmitting one or more control signals to the network radio of the wireless mobile terminal (see col. 3, lines 39-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a configuration bank that stores power management schemes and controlling the power of the at least one portion of the wireless terminal by wirelessly transmitting one or more control signals to the network radio of the wireless mobile terminal because both Montgomery, Jr. and Romans teach managing power for wireless mobile terminals that can receive and transmit wireless signals.

It would have also been obvious to one of ordinary skill in the art to make the device adapt to include a wireless barcode scanner as taught in Schneider (see Schneider,

paragraph [0009]) because the functioning of a wireless mobile device can be implemented in a wireless barcode scanner.

VII. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery, Jr. (US 6,205,343 B1) in view of Romans (US 6,564,074 B2), Roy (US 2005/0041652 A1) and Hetzler (US 5,954,820).

Regarding claim 27 Montgomery, Jr., Romans, and Roy teach a device as recited in claim 26 except for polling at least one disparate component associated with the wireless mobile terminal to determine frequency of use, the frequency of use employed to control a level of power to the disparate component. Hetzler teaches polling at least one disparate component associated with the wireless mobile terminal to determine frequency of use, the frequency of use employed to control a level of power to the disparate component (see col. 2, lines 63-67 and col. 3, lines 1-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include polling at least one disparate component associated with the wireless mobile terminal to determine frequency of use, the frequency of use employed to control a level of power to the disparate component because Montgomery, Jr., Romans, Roy, and Hetzler all teach managing power for wireless mobile terminals that can receive and transmit wireless signals.

Response to Arguments

VIII. Applicant's arguments with respect to claims 1, 3-9, 11-15, 17-19, and 21-27 have been considered but are moot in view of the new ground(s) of rejection.

IX. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

X. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Harimoto U.S Patent No. 6,684,083 B1 discloses portable information terminal with standby power supply.

Paver et al. U.S. Patent No. 7,245,945 B2 discloses a portable computing device adapted to update display information while in a lower power mode.

XI. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON J. MILLER whose telephone number is (571)272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

February 27, 2008

/Brandon J Miller/
Examiner, Art Unit 2617

/George Eng/
Supervisory Patent Examiner, Art Unit 2617